

ABSTRACT OF THE DISCLOSURE

An integrated circuit package and method that provides excellent visibility to the orientation of the package substrate throughout all stages of the device assembly process, and over a wide range of ambient light conditions. The package uses an existing metalization layer to designate a reference corner of the package. A lower portion 102 of the package includes an intermediate metalization layer patterned on the surface of the lower portion. This metalization is used to connect the device 104 being packaged with circuitry outside the package. An upper portion 108 of the package is supported by the lower portion of the package and sandwiches the intermediate layer. At least one corner of the upper layer 108 exposes a region 110 of the intermediate metalization layer. This region is highly visible since it is reflective and located outside of the package cavity. The metalization region 110 may also be plated or tinned to increase its visibility. Unlike orientation designators located on the top of a package, the metalization region 110 is visible before the package has been completed. This is useful when manufacturing steps rely on human intervention or assistance. The preceding abstract is submitted with the understanding that it only will be used to assist in determining, from a cursory inspection, the nature and gist of the technical disclosure as described in 37 C.F.R. § 1.72(b). In no case should this abstract be used for interpreting the scope of any patent claims.